

Environmental Assessment

Resighini Rancheria Water Resources Development Project



Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitment to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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List of Acronyms, Abbreviations, and Definition of Terms

APE Area of Potential Effect

ARRA American Recovery and Reinvestment Act

CFR Code of Federal Regulations EA Environmental Assessment

FWCA Fish and Wildlife Coordination Act

GHG Greenhouse Gas Emission

IPCC Intergovernmental Panel on Climate Change

IRA Indian Reorganization Act

ITA Indian Trust Assets

MBTA Migratory Bird Treaty Act

NEPA National Environmental Policy Act NHPA National Historic Preservation Act NRHP National Register of Historic Places

Rancheria Resighini Rancheria Reclamation Bureau of Reclamation

SHPO State Historic Preservation Officer
THPO Tribal Historic Preservation Office

Tribe Reshigini tribe

USFWS U.S. Fish and Wildlife Service

Section 1 Purpose and Need for Action

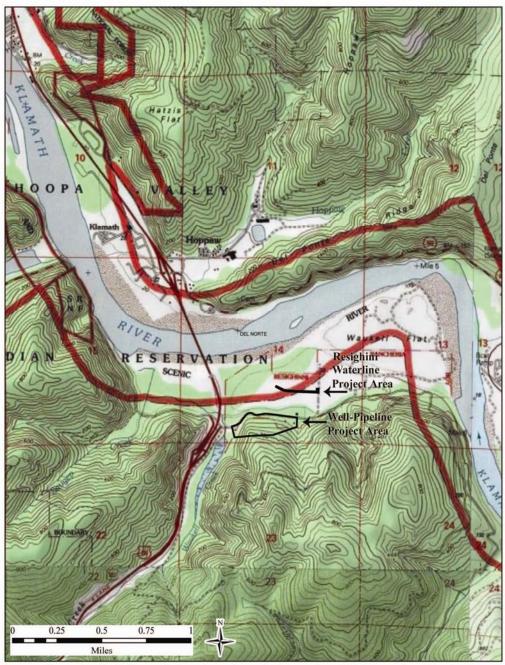
1.1 Introduction

Pursuant to the Bureau of Reclamation (Reclamation) States Emergency Drought Relief Act of 1991, as amended (Drought Act), and other authorities, Reclamation is planning to use \$40 million from the American Recovery and Reinvestment Act (ARRA) to fund emergency drought relief projects that can quickly and effectively mitigate the consequences that have resulted from drought conditions in California.

2009 was the third consecutive year of drought conditions in the State of California. Governor Schwarzenegger declared a drought emergency for the entire state. The Resighini Rancheria (Rancheria) is suffering from the prolonged drought and experiencing severe effects to the health and safety of tribal members. In compliance with Section 104 of the Drought Act, the Rancheria has declared a drought emergency and requested Reclamation's assistance for the purpose of installing and developing a community well and associated distribution systems to provide a dependable source of drinking water on the Rancheria.

The Rancheria tribe (tribe) is a federally recognized Indian tribe organized under the authority of the Indian Reorganization Act (IRA) of 1934. In 1975 members of the tribe adopted a Constitution and have been actively involved in developing its tribal government and protecting its land base. The people of the tribe are ethnographically known as among those identified as Yurok. The Rancheria is the only Indian Rancheria in the State of California that is situated within the exterior boundaries of lands granted to a separately federally recognized Indian tribe.

The Rancheria is located on the Lower Klamath River on the floodplain adjacent to Highway 101, approximately four miles from the Pacific Ocean in Del Norte County, California (Figure 1). The Rancheria consists of 435 acres and all are tribally owned, most held as tribal trust land. Currently some tribal members are living on an area of the Rancheria that their water distribution system does not serve. The tribe has requested funds from Reclamation for the purposes of installing and developing a community drinking well and associated distribution systems to provide a potable water source to the tribal members who currently do not have access to drinking water on the Rancheria. In addition, the Proposed Action would ensure that the Rancheria has a dependable water source to serve the tribal residences, office buildings, casino and the RV campground during drought conditions or in the event that their existing well fails.



The water line and well-pipeline projects are located near the intersection of Highway 101 and Southeast Klamath Beach Road in sec. 14, T. 13 N., R. 1 E., Mount Diablo Meridian, as depicted on the Requa 7.5' USGS topographic quadrangle. Scale 1:24,000. The water line project involves 0.8-acres and the well-pipeline project will occur within a 22-acre area.

Figure 1 – Proposed Action area

1.2 Purpose and Need

In response to drought conditions in California and the tribe's request for assistance, Reclamation proposes to provide ARRA funding for the installation and development of a community drinking well and associated distribution systems on the Rancheria. The purpose of the Proposed Action is to provide a dependable potable source of water to the tribal members who currently do not have access to a drinking water source as well as provide a dependable water source for current tribal residences, office buildings, casino and the RV campground during drought conditions or in the event that the existing Rancheria well fails. The Rancheria is in need of an additional source of dependable drinking water to reduce potential health risks associated with their current operation.

This EA is in compliance with the National Environmental Policy Act (NEPA) and Council on Environmental Quality (CEQ) regulations (40 CFR 1500-1508). Reclamation has also prepared a Finding of No Significant Impact (FONSI) which explains why the Proposed Action will not have a significant effect on the human environment.

1.3 Potential Resource Issues

The resource areas listed below have the potential to be affected by the Proposed Action and are discussed in Sections 3.1 through 3.10.

- Surface Water Resources
- Groundwater Resources
- Geology and Soils
- Land Use
- Biological Resources
- Cultural Resources
- Indian Trust Assets
- Environmental Justice
- Climate Change
- Cumulative Impacts

1.4 Resources Not Analyzed in Detail

Based on review of the Proposed Action, it was determined that the Proposed Action would not impact the following resources: water quality, recreation, air quality, visual, transportation, noise, hazards and hazardous materials, and socioeconomics. Hence, impacts to these resources are not analyzed in this environmental assessment (EA).

Section 2 Alternatives Including Proposed Action

2.1 No Action Alternative

The No Action Alternative would include Reclamation not providing funding to the Rancheria for the installation and development of a community drinking well and associated distribution systems to provide a dependable source of water to tribal members. Under this alternative the tribal members would not receive potable water and thus resulting in potential health issues.

2.2 Proposed Action Alternative

The Proposed Action Alternative would include ARRA funding provided by Reclamation for the installation and development of a new community drinking well and associated distribution systems to provide a dependable source of water on the Rancheria. The distribution systems would convey water from the new well to an existing water line that serves the Reservation community as well as a designated area on the Reservation where tribal members are temporarily living. The water line that would convey potable water to the temporary living area would be six inches wide and approximately 1,500 ft long and would terminate with eight one-inch hook ups.

The Proposed Action would comply with California's Department of Water Resources (DWR) well standards, National Electrical Code (NEC) standards, American Society of Mechanical Engineers (ASME) standards and the International Plumbing Code (IPC). The Proposed Acton would include the following steps:

1) Construction of the well

- Drill a nominal 18 inch diameter hole from 0 to 50 feet; install and grout 14 inch diameter steel conductor casing from 0 to 50 feet.
- Drill a nominal 12 inch diameter pilot hole from 50 to 100 feet and geophysically log the drill hole.
- Install 6 inch diameter steel screen or perforated casing with a 10 foot long blank sump and end cap attached to the bottom from approximately 50 to 100 feet deep (50 feet long including sump).
- Install six inch diameter blank casing from the top of the screened interval to the surface. The well screen and well casing will be centered and supported by means of centering guides.
- Install filter pack from the bottom of the drill hole to the bottom of the conductor casing.
- Install bentonite and grout plug to seal from top of filter pack to surface.
- Conduct 24 hour minimum pump test or other appropriate pump tests depending on groundwater conditions, including eight hours of recovery.

- Furnish and install a submersible pump capable of delivering sustainable yield as determined from the pump test, motor, controller, drop pipe, sounding tube and related infrastructure necessary for the operation of the well.
- Perform water quality tests by an Environmental Protection Agency (EPA) certified laboratory. The water sample would be collected after the well was pumped long enough to ensure that water from the producing formation has entered the well.
- Construct a minimum 4 inch thick concrete pad around the well head that extends at least two feet laterally in all directions.

2) Power Connection

- Furnish and install one weather head to new well house for power company to attach directly to the well house.
- Furnish and run wire from weather head into well house and through the meter and circuit breaker enclosure.
- Furnish and install one meter enclosure on exterior of well house.
- Furnish and install one National Electrical Manufactures Association 3R, 20 Amp/3 Pole Circuit Breaker Enclosure and circuit breaker.
- Furnish and run rigid galvanized steel conduit and connect to a liquid tight flexible metal conduit that runs directly to the motor.
- Furnish and install necessary conduit and wire for light and receptacle to be in well house.
- Furnish and install American Wire Gauge wire necessary to meet all pump loads and connect from electrical service to meter, breaker, and to pump.

3) Construction of well house

- Pour a 6 x 10 foot concrete foundation that would be eight inches thick.
- Install A98 steel mesh that would have a minimum of two inches of top cover (not exceeding three inches below the top of the concrete slab).
- Install (at minimum) three J bolts on each side of the structure to the concrete foundation.
- Construct a six foot wide, 10 foot long, and eight foot high enclosure to protect the hydro pneumatic tank and chlorination system.

4) <u>Installation of a Hydro Pheumatic Tank and Chlorination System</u>

- Furnish and install a 50 gallon (at minimum) hydro pneumatic tank. The dimensions of the tank would allow for installation after the well house was constructed.
- Furnish and install a five gallon (at minimum) tank for liquid sodium hypochlorite.
- Furnish and install a metering pump that would be capable of creating four parts per million chlorine solution to meet federal drinking water standards.
- Furnish and install all hosing necessary to meter liquid sodium hypo chlorite.

5) Installation of Water Heater and Hot and Cold Hose Bibs

- Furnish and install a 50 gallon electric hot water heater. Installation would meet all local and state standards.
- Connect water heater to the electrical panel.
- Furnish and install separate breaker for the hot water heater.
- Furnish and install hot and cold hose bibs outside the building.

6) Installation of Pipe Stub for Future Connection

- Excavate a utility trench three feet deep, six inches wide and approximately 1,500 feet long, beginning at the well house and extending to existing piping going to the storage tanks and eight one-inch hook ups.
- Extend a three inch polyvinyl chloride (PVC) line out of the well house and turn underground. Construct new waterline out of Schedule 40 PVC with solvent-welded joint couplings.
- Furnish and ensure water is suitable for domestic use.
- Cap the pipeline for future connection.

Section 3 Affected Environment & Environmental Consequences

The Rancheria's boundaries are abutted by Highway 101 on the west side, the Klamath River on the north, and a private industrial timberland owner, the Green Diamond Resource Company, now doing business as the California Forest Projects, on the south and eastern sides. The Rancheria consists of 435 acres and is approximately four miles from the Pacific Ocean in Del Norte County, California. Del Norte County is located at the far northwest corner of the State of California adjacent to the Oregon border.

The nearest town to the Rancheria is Klamath, California. Klamath, California is 22 feet above mean sea level. The climate is humid with cool, foggy summers and cool, rainy winters. The mean annual precipitation is 58 inches. The maximum temperature in January is 54.9°F and the maximum temperature in August is 61°F.

The majority of the land on the Rancheria consists of wetlands, arable flood plain and an overflow channel which has been mined for its sand and gravel in years past. The Rancheria community includes tribal offices, a casino, residential and ancillary structures, a campground, cultivated land that is mowed and baled for livestock feed annually, and open space.

3.1 Surface Water Resources

3.1.1 Affected Environment

Surface water resources within the Proposed Action area and surrounding area include the Klamath River. The Klamath River, located on the Pacific coast in southern Oregon and northern California, is approximately 250 miles (400 km) long. The Klamath River flows from its headwaters near Crater Lake and the wetlands of Oregon's upper Klamath basin to its confluence with the Pacific Ocean at the town of Klamath, California. The Klamath Basin can be divided into the upper basin, which extends north and east from the Iron Gate Dam on the mainstem of the Klamath River, and the lower basin, which extends south and west from Iron Gate to the Pacific Ocean. The Proposed Action area is located within the lower basin. Within the lower basin the Klamath River is incised deeply into bedrock, forming a narrow canyon. The Lower Klamath River runs unobstructed to the ocean. Four major tributaries (the Shasta, Scott, Salmon, and Trinity rivers) enter the Klamath mainstem below Iron Gate Dam.

The annual and seasonal flows on the Klamath River generally reflect climatic conditions and cycles. Precipitation patterns in the basin are seasonal, with 60 percent of the total annual precipitation falling from November to March. December and January are the wettest months; the driest months are between June and September (NAS 2004).

3.1.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would not provide funding to the Rancheria for the installation and development of a community drinking well and associated distribution systems. Under the No Action the Rancheria would not receive a dependable source of drinking water which could result in potential health risks to tribal members. Under the No Action Alternative, surface water use would not increase or decrease and, therefore, would have no significant impacts to surface water.

Proposed Action

Under the Proposed Action, Reclamation would provide funding to the Rancheria for the installation and development of a new community drinking well and associated distribution systems to provide a dependable source of water on the Rancheria. The Proposed Action would include construction of a groundwater well that would be located in a confined aquifer of the Lower Klamath River Valley groundwater basin. Under the Proposed Action, surface water use would not increase or decrease and, therefore, would not result in short-term or long-term significant impacts to surface water or the resources dependent on surface water.

3.2 Groundwater Resources

3.2.1 Affected Environment

The Rancheria is located in the Lower Klamath River Valley groundwater basin number 1-14 in Del Norte and Humboldt counties, California. The groundwater basin is 7,030 acres and is located inland from the Pacific coast. The basin consists of Quaternary alluvial deposits, terrace deposits, and dune and beach sand deposits from the Klamath River and its tributaries. The basin is bounded on all sides by the Franciscan Formation. The Franciscan Formation is a geology term for an accreted terrane of heterogeneous rocks found on and near the San Francisco Peninsula. The Franciscan Formation includes altered mafic volcanic rocks (greenstones), deep-sea radiolarian cherts, greywacke sandstones, limestones, serpentinites, shales, and high-pressure metamorphic rocks, all of them faulted and mixed in a seemingly chaotic manner.

Hydrogeologic information is currently not available for water-bearing formation, groundwater level trends, and groundwater storage for the Lower Klamath River Valley groundwater basin. Currently there are no known groundwater management plans, gorundwater ordinacnces, or basin adjudications.

Estimates of groundwater extraction are based on a survey conducted by the California Department of Water Resources in 1996. The survey included land use and sources of water. Estimates of groundwater extraction of agricultural and municipal/industrial uses are 410 and 160 acre-feet respectively. Deep percolation from applied water is estimated to be 210 acre-feet (DWR 2004).

3.2.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would not provide funding to the Rancheria for the installation and development of a community drinking well and associated distribution systems. Under the No Action the Rancheria would not receive a dependable source of drinking water and therefore could result in potential health risks to tribal members. Under the No Action Alternative, groundwater use would not increase or decrease and, therefore, would not result in short-term or long-term significant impacts to groundwater resources.

Proposed Action

Under the Proposed Action, Reclamation would provide funding to the Rancheria for the installation and development of a new community drinking well and associated distribution systems to provide a dependable source of water on the Rancheria. The Rancheria's public water system was built in 2003 and consists of one 60' well that produces 40 gpm. The public water system tests for coliform bacteria monthly and lead, copper, nitrates etc. on an annual basis. The water is injected with chlorine and soda ash in the pump house located adjacent to the wellhead and pumped to a 40,000 gallon storage tank located approximately 125' above the pump house at 166' elevation. Five residences, three office buildings (one currently unused), a casino (currently closed), and a seasonal 50-space RV campground utalize the Rancheria's water system. The proposed new well would be located in a confined aquifer separate from the Rancheria's existing well to safegaurd the new well water supply from potential contamination or well failure. Water quality tests would be preformed by an EPA certified laboratory and the new well would comply with DWR's well standards. Under the Proposed Action, groundwater use would increase though is temporary and would not be a significant measurable change to the groundwater resources within the basin due to the minute amount that would be needed to provide a necessary amount of potable water to the temporary living area on the Rancheria. In addition, the new well would supplement the Rancheria's current well if there was a failure or contamination occurred within the public water system and therefore aid in reducing health risks associated with their current system. Under the Proposed Action, groundwater use would not result in short-term or long-term significant impacts to groundwater resources in the Lower Klamath River groundwater basin.

3.3 Geology and Soils

3.3.1 Affected Environment

Del Norte County can be divided into two topographic entities; the mountainous portion of the County (approximately 92% of the total County area) and the restricted coastal lowland and dismembered assemblage of mainly marine rocks deposited during a time span of 90,000 to 145,000 years ago.

The Rancheria is located within the northern Coast Ranges Geologic Province, a seismically active region in which large earthquakes are expected to occur during the economic life span of the Proposed Action. Geologic mapping indicates the project area

to be underlain by Quaternary alluvium, consisting of poorly consolidated silts, sands, and gravels. Topographically, the project site is situated on a gently sloping surface with a generally north to northwestern slope aspect. Slope gradients in the Proposed Action area are less than ten percent with slightly steeper slopes at the west and east ends of Klamath Beach Road, and immediately adjacent to Waukell Creek and Junior Creek (LACO 2008).

The Proposed Action area is not situated within an Alquist-Priolo earthquake hazard zone. The Big Lagoon - Bald Mountain fault is located between about 10 and 20 miles southwest offshore, and is the closest recognized active fault to this site. The upper-bound earthquake considered likely to occur on the Big Lagoon – Bald Mountain fault is a Type B fault that has an estimated slip rate of 0.5 millimeters per year, and an estimated maximum moment magnitude (Mw) of 7.3 (LACO 2008).

3.3.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would not provide funding to the Rancheria for the installation and development of a community drinking well and associated distribution systems. The No Action Alternative would result in no significant impacts to geology or soils on the Rancheria.

Proposed Action

Under the Proposed Action, Reclamation would provide funding to the Rancheria for the installation and development of a new community drinking well and associated distribution systems to provide a dependable source of water on the Rancheria. The Proposed Action area is not situated within an Alquist-Priolo earthquake hazard zone. The proposed water line would run across a section of riparian grassland which is a predisturbed flat area so potential erosion is not expected to occur. The proposed new well site would also be located on relatively flat pre-distrubed land and is not expected to alter the geology or soils of the area. In addition, the area that would be disturbed during installation of the well and distribution systems would be temporary and returned to the existing conditions following the completion of construction activities. The Proposed Action would not significantly affect geology or soils in the project area.

3.4 Land Use

3.4.1 Affected Environment

The Rancheria community includes tribal offices, a casino, residential and ancillary structures, a campground, cultivated land that is mowed and baled for livestock feed annually and open space. The existing conditions are highly modified from natural conditions, and the Proposed Action area has a long history of human use.

3.4.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would not provide funding to the Rancheria for the installation and development of a community drinking well and associated distribution systems. Under the No Action the Rancheria would not receive a dependable source of drinking water and therefore could result in potential health risks to tribal members. Land use would remain unchanged under the No Action Alternative.

Proposed Action

Under the Proposed Action, Reclamation would provide funding to the Rancheria for the installation and development of a new community drinking well and associated distribution systems to provide a dependable source of water on the Rancheria. The Proposed Action area is within the developed footprint of the Rancheria and is a disturbed feature in the landscape. The existing conditions are highly modified from natural conditions, and the Proposed Action area has a long history of human use. The construction footprint of the proposed well is minute when compared to the surrounding pre-disturbed Rancheria land and the proposed route for the water line runs across a section of riparian grassland that has been cultivated in the past and is presently mowed and baled for livestock feed annually. In addition, the area that would be disturbed during installation of the well and distribution systems would be temporary and returned to the existing conditions following the completion of construction activities. The Proposed Action would not result in any land use changes and therefore, the Proposed Action would not significantly affect land use in the project area.

3.5 Biological Resources

3.5.1 Affected Environment

The Rancheria is located on the upper floodplain of the Klamath River in California. The local natural environment and common species within the area include trees such as coast redwood (Sequoia sempervirens), sitka spruce (Picea sitchensis), western hemlock (Tsuga heterophylla) and Douglas fir (Pseudotsuga menziesii). Understory vegetation includes tanoak (Lithocarpus densiflorus), California salmonberry (Rubus spectabilis), evergreen huckleberry (Vaccinium ovatum), red huckleberry (Vaccinium parvifolium) and thimbleberry (Rubus parviflorus). Mammmals include Roosevelt elk (Cervus canadensis roosevelti), black bear (Ursus americanus), black-tailed deer (Odocoileus columbianus), raccoon (Procyon lotor) and brush rabbit.

The Proposed Action area is within the developed footprint of the Rancheria and is a disturbed feature in the landscape. The existing conditions are highly modified from natural conditions, and the Proposed Action area has a long history of human use.

<u>Potentially Affected Special-Status Species for the Resighini Rancheria Area</u>
The California Natural Diversity Database (CNDDB) and U.S. Fish and Wildlife Service (USFWS) websites were reviewed for the potential occurrences and/or habitat associated

with special-status species in the Klamath Glen USGS 7.5-minute quadrangle on July 19, 2010. The following table includes special-status species that could potentially occur within the Klamath Glen quadrangle.

Table 1: Special-Status Species Identified as Potentially Occurring in the Klamath

Glen USGS 7.5-minute Quadrangles

Species Name FISH	Status Fed/State	Species Habitat	Occurances and/or Species Habitat within Proposed Action Area
green sturgeon Acipenser medirostris	Т/-	Anadromous fish that occupy freshwater rivers from the Sacramento River up through British Columbia, but spawning has been confirmed in only three rivers, the Rogue River in Oregon and the Klamath and Sacramento rivers in California.	No associated habitat in the Proposed Action area
tidewater goby Eucyclogobius newberryi	E/-	Coastal lagoons and the uppermost brackish zone of larger estuaries, rarely invading marine or freshwater habitats.	No associated habitat in the Proposed Action area
Southern Oregon/Northern California coho salmon Oncorhynchus kisutch	T/ST	Anadromous fish that spend half of their life cycle rearing and feeding in streams and small freshwater tributaries. Spawning habitat is small streams with stable gravel substrates. The remainder of the life cycle is spent foraging in estuarine and marine waters of the Pacific Ocean.	No associated habitat in the Proposed Action area
Southern eulachon DPS Thaleichthys pacificus	PT/-	Anadromous fish spawning in rivers south of the Nass River in British Columbia, Canada, to, and including, the Mad River in California. May have historically included the Klamath River.	No associated habitat in the Proposed Action area
coast cutthroat trout Oncorhynchus clarkii clarkii	-/ G4T4-S3	Small coastal streams from the Eel River to the Oregon border	No associated habitat in the Proposed Action area

AMPHIBIANS			
Del Norte salamander Plethodon elongatus	-/G4-S3	Optimum conditions for this old-growth associated species occur in the mixed conifer/hardwood ancient forest ecosystem. Inhabits cool, moist, stable microclimates with a deep litter layer and closed multi-storied canopy, dominated by large, old trees	No occurances within Proposed Project area
southern torrent salamander Rhyacotriton variegatus	-/ G3G4- S2S3	Inhabits coastal redwood, Douglas-fir, mixed conifer, montane riparian and montane hardwood-conifer habitats. Requires old-growth forest and cold, well-shaded, permanent streams and seepages, or areas within the splash zone or on moss-covered rock within trickling water	No occurances within Proposed Project area
Pacific tailed frog Ascaphus truei	-/ G4-S2S3	Inhabits coastal redwood, Douglas-fir, mixed conifer, montane riparian and montane hardwood-conifer habitats. Perennial montane streams – tadpoles require water below 15 degrees Celsius.	No occurances within Proposed Project area
MAMMALS			
fisher (west coast DPS) Martes pennanti	C/G5-S2S3	North coast coniferous forest/Oldgrowth/ Riparian forest	No occurances within Proposed Project area
Humboldt marten Martes americana humboldtensis	-/G5T2T3- S2S3	Only occurs in coastal redwood zone from the Oregon border south to Sonoma County	No occurances within Proposed Project area
BIRDS	mm ~~ -:		
marbled murrelet Brachyramphus marmoratus	T/E-G3G4- S1	Feeds near-shore and nests inland along the coast from Eureka, Humboldt County to the Oregon border and from Half Moon Bay, San Francisco County to Santa Cruz, Santa Cruz County. It nests in old-growth redwood-dominated forests, typically not more than 6 miles inland, often in	No occurances in Proposed Action area

		Douglas-fir	
Western yellow-billed cuckoo Coccyzus americanus	C/SE	Densely foliaged, deciduous trees, shrubs, willows	No occurances within Proposed Project area
northern spotted owl Strix occidentalis caurina	T/-	Dense, old-growth, multi- layered mixed conifer, redwood, and Douglas-fir habitats, from sea level up to approximately 2300 m	No occurances within Proposed Project area
osprey Pandion haliaetus	-/G5-S3	Primarily along rivers, lakes, bays, and seacoasts. Nests in dead snags, living trees, utility poles, etc. usually near or above water	No occurances within Proposed Project area
great blue heron Ardea herodias	-/G5-S4	Rookery sites in close proximity to foraging area; marshes, lake margins, tide-flats, rivers and streams, wet meadows	No occurances within Proposed Project area
INVERTEBRATES			,
mardon skipper Polites mardon	C/S3	Freshwater marsh/Lower montane coniferous forest/Marsh and swamp/ Meadow and seep/Riparian woodland/Wetland	No occurances within Proposed Project area
PLANTS			
serpentine catchfly silene serpentinicola	-/G2-S2.2	Chaparral, lower montane coniferous forest	No occurances within Proposed Project area
ghost-pipe Monotropa uniflora	-/G5-S2S3	Broadleaved upland forest, North coast coniferous forest	No occurances within Proposed Project area
leafy reed grass Calamagrostis foliosa	-/G3-S3.2	Coastal bluff scrub, North coast coniferous forestconiferous forest/Ultramafic	No occurances within Proposed Project area

Key:

- (PE) Proposed Endangered Proposed in the Federal Register as being in danger of extinction
- (PT) Proposed Threatened Proposed as likely to become endangered within the foreseeable future
- (E) Endangered– Listed in the Federal Register as being in danger of extinction
- (T) Threatened Listed as likely to become endangered within the foreseeable future
- (C) Candidate Candidate which may become a proposed species
- (SE) State Endangered State listed as being in danger of extinction
- (ST) State Threatened State listed as likely to become endangered
- (SSC) State Species of Special Concern CDFG
- (S) State Rank CNDDB
- (G) Global Rank CNDDB

- not listed

3.5.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would not provide funding to the Rancheria for the installation and development of a community drinking well and associated distribution systems. Under the No Action the Rancheria would not receive a dependable source of drinking water and therefore could result in potential health risks to tribal members. The tribe would continue current land use practices resulting in no significant impacts to biological resources.

Proposed Action

Under the Proposed Action, Reclamation would provide funding to the Rancheria for the installation and development of a new community drinking well and associated distribution systems to provide a dependable source of water on the Rancheria. The Proposed Action area is within the developed footprint of the Rancheria and is a disturbed feature in the landscape. The existing conditions are highly modified from natural conditions, and the Proposed Action area has a long history of human use. The Proposed Action would not include activities that would be located within, or in close proximity to, waters of the U.S. or their associated riparian habitat and therefore, the Proposed Action would not impact listed fish species or species who inhabitat or utalize these areas. The construction activities would be short in duration and the area that would be disturbed during installation of distribution systems would be temporary and returned to the existing conditions following the completion of construction activities. The CNDDB and USFWS websites were reviewed for the potential occurrence of specialstatus species. Based on known observations and the absence of suitable habitat, there would be no significant affects to listed species resulting from the Proposed Action (CNDDB, 2010, USFWS, 2010). The Proposed Action would not result in short-term or long-term significant impacts to biological resources in the project area or surrounding area. In addition, due to the Proposed Action area being previously disturbed, no wilderness designations or unique ecosystem, biological community or its inhabitants are expected to be impacted by the project.

3.6 Cultural Resources

3.6.1 Affected Environment

A cultural resource is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. The National Historic Preservation Act (NHPA) of 1966 is the primary Federal legislation that outlines the Federal Government's responsibility to cultural resources. Section 106 of the NHPA requires the Federal Government to take into consideration the effects of an undertaking on cultural resources listed on or eligible for inclusion in the National Register of Historic Places (NRHP). Those resources that are on, or eligible for inclusion on, the NRHP are referred to as historic properties.

The Section 106 process is outlined in the Federal regulations at 36 Code of Federal Regulations (CFR) Part 800. These regulations describe the process that the Federal

agency (Reclamation) takes to identify cultural resources and the level of effect that the proposed undertaking will have on historic properties. In summary, Reclamation must first determine if the action is the type of action that has the potential to affect historic properties. If the action is the type of action to affect historic properties, Reclamation must identify the area of potential effects (APE), determine if historic properties are present within that APE, determine the effect that the undertaking will have on historic properties, and consult with the State Historic Preservation Officer (SHPO), to seek concurrence on Reclamation's findings. In addition, Reclamation is required through the Section 106 process to consult with Indian tribes concerning the identification of sites of religious or cultural significance, and consult with individuals or groups who are entitled to be consulting parties or have requested to be consulting parties.

In an effort to identify historic properties, a Reclamation Archaeologist searched the cultural resources files located at the Bureau of Indian Affairs. Reclamation initiated a records search by the North Coastal Information Center in Klamath, California on January 22, 2010 for the Project Area. Reclamation contracted ICF International, who conducted cultural resources surveys of each Project Area on June 29, 2010. No cultural resources were identified (Crawford 2010).

Reclamation sent letters to the Resighini Rancheria on January 22, 2009 and July 23, 2010 to invite their assistance in identifying sites of religious and cultural significance pursuant to the regulations at 36 CFR 800.3(f)(2) and 36 CFR Part 800.4(a)(4). Reclamation is also consulting with the Resighini Tribe on July 29, 2010 on the same basis as the State Historic Preservation Officer (SHPO) pursuant to the regulations at 36 CFR Part 800.3(d) since this project is located on Tribal lands. Concurrence from the SHPO and Resighini Rancheria to conclude the Section 106 compliance process is pending.

3.6.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would not provide funding to the Rancheria for the installation and development of a community drinking well and associated distribution systems. Conditions related to cultural resources would remain the same as existing conditions. There would be no impacts to cultural resources under the No Action alternative.

Proposed Action

Under the Proposed Action, Reclamation would provide funding to the Rancheria for the installation and development of a new community drinking well and associated distribution systems to provide a dependable source of water on the Rancheria. The Proposed Action is the type of activity that has the potential to affect historic properties. A records search, pedestrian survey, and Tribal consultation failed to identify any historic properties within the project area. Since no historic properties would be affected, no cultural resources would be impacted as a result of implementing the Proposed Action.

Concurrence from the SHPO and Resighini Rancheria to conclude the Section 106 compliance process is pending.

3.7 Indian Trust Assets

3.7.1 Affected Environment

Indian Trust Assets (ITAs) are legal interests in property or rights held in trust by the United States for Indian tribes or individuals. Trust status originates from rights imparted by treaties, statutes, or executive orders. These rights are reserved for, or granted to, tribes. A defining characteristic of an ITA is that such assets cannot be sold, leased, or otherwise alienated without Federal approval.

Indian reservations, rancherias, and allotments are common ITAs. Allotments can occur both within and outside of reservation boundaries and are parcels of land where title is held in trust for specific individuals. Additionally, ITAs include the right to access certain traditional use areas and perform certain traditional activities.

It is Reclamation policy to protect ITAs from adverse impacts resulting from its' programs and activities whenever possible. Types of actions that could affect ITAs include an interference with the exercise of a reserved water right, degradation of water quality where there is a water right or noise near a land asset where it adversely affects uses of the reserved land.

3.7.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would not provide funding to the Rancheria for the installation and development of a community drinking well and associated distribution systems. Under the No Action the Rancheria would not receive a dependable source of drinking water and therefore could result in potential health risks to tribal members. The No Action Alternative would result in no significant impacts to ITAs on the Rancheria.

Proposed Action

Under the Proposed Action, Reclamation would provide funding to the Rancheria for the installation and development of a new community drinking well and associated distribution systems to provide a dependable source of water on the Rancheria. The Proposed Action would be conducted within the Rancheria and therefore would not significantly affect ITAs.

3.8 Environmental Justice

3.8.1 Affected Environment

Executive Order 12898 requires each Federal agency to achieve environmental justice as part of its mission, by identifying and addressing disproportionately high adverse human

health or environmental effects, including social and economic effects, of its programs and activities on minority populations and low-income populations of the United States.

3.8.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would not provide funding to the Rancheria for the installation and development of a community drinking well and associated distribution systems. Under the No Action the tribe would not be able to provide high-quality drinking water for its members and their health and safety may be compromised as a result which would be an adverse impact to tribe members and, thus, an adverse impact to environmental justice.

Proposed Action

Under the Proposed Action, Reclamation would provide funding to the Rancheria for the installation and development of a new community drinking well and associated distribution systems to provide a dependable source of water on the Rancheria. The Proposed Action would not disproportionately impact economically disadvantaged or minority populations. In fact, the Proposed Action would address existing negative effects upon a minority population and improve the standard of living by providing a potable water source to tribal members.

3.9 Global Climate Change

3.9.1 Affected Environment

On December 7, 2009, the EPA Administrator found that current and projected concentrations of greenhouse gases (GHGs) threaten the public health and welfare. The Council on Environmental Quality (CEQ) also has issued a memorandum providing guidance on the consideration of the effects of climate change and GHG emissions under NEPA (Sutley 2010). The Draft Guidance suggests that the effects of projects directly emitting GHGs in excess of 25,000 tons annually be considered in a qualitative and quantitative manner.

The State of California also has several programs in place that reduce and minimize GHG emissions. The most stringent of these are EO S-3-05 and Assembly Bill 32 (AB 32). EO S-3-05 is designed to reduce California's GHG emissions to: (1) 2000 levels by 2010, (2) 1990 levels by 2020, and (3) 80 percent below 1990 levels by 2050. AB 32 sets the same overall reduction goals as EO S-3-05 while further mandating that ARB create a plan, which could include market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." While these federal and state actions represent important GHG reduction efforts, no specific thresholds have been published for determining NEPA effects related to climate change.

3.9.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would not provide funding to the Rancheria for the installation and development of a community drinking well and associated distribution systems. Under the No Action the Rancheria would not receive a

dependable source of drinking water and therefore could result in potential health risks to tribal members. The No Action Alternative would have no effect on climate change.

Proposed Action

Under the Proposed Action, Reclamation would provide funding to the Rancheria for the installation and development of a new community drinking well and associated distribution systems to provide a dependable source of water on the Rancheria. Construction activities associated with the Proposed Action would generate short-term emissions of ROG, NOx, CO, PM10, PM2.5, and GHGs. Emissions would originate from mobile and stationary construction equipment exhaust, employee vehicle exhaust, and dust from site grading. GHG emissions from construction activities are primarily the result of fuel use by construction equipment and worker trips. These emissions are minuscule compared to state, national, and federal GHG emissions and would cease once construction activities are complete. Moreover, GHG emissions are more appropriately evaluated on a regional, state, or even national scale rather than on an individual project level. The Proposed Action would not result in significant GHG emissions and therefore would not have an individually discernable effect on global climate change.

3.10 Cumulative Effects

The Proposed Action would not result in significant cumulative impacts to surface water resources, groundwater resources, geology and soils, land use, biological resources, cultural resources, ITAs, environmental justice, or global climate change.

Section 4 Consultation and Coordination

4.1 Federal Laws and Executive Orders

The following federal laws were considered during the preparation of this EA and the evaluation of the potential impacts from the Proposed Action.

4.1.1 Fish and Wildlife Coordination Act (16 USC. 661 et seq.)

The Fish and Wildlife Coordination Act (FWCA) requires that Reclamation consult with fish and wildlife agencies (federal and state) on all water development projects that could affect biological resources. The Proposed Action does not involve any new impoundment or diversion of waters, channel deepening, or other control or modification of a stream or body of water as described in the statute; therefore the FWCA does not apply.

4.1.2 Endangered Species Act (16 USC. 1531 et seq.)

Section 7 of this Act requires Federal agencies to ensure that all federally associated activities within the United States do not jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of the critical habitat of these species. Action agencies must consult with the Service, which maintains current lists of species that have been designated as threatened or endangered, to determine the potential impacts a project may have on protected species.

Reclamation determined that the Proposed Action would have no effect on federally proposed or listed threatened and endangered species or their proposed or designated critical habitat. No further consultation is required under Section 7 of the Endangered Species Act.

4.1.3 Migratory Bird Treaty Act (16 USC § 703 et seq.)

The Migratory Bird Treaty Act (MBTA) implements various treaties and conventions between the U.S. and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Unless permitted by regulations, the Act provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. Subject to limitations in the Act, the Secretary of the Interior (Secretary) may adopt regulations determining the extent to which, if at all, hunting, taking, capturing, killing, possessing, selling, purchasing, shipping, transporting or exporting of any migratory bird, part, nest or egg will be allowed, having regard for temperature zones, distribution, abundance, economic value, breeding habits and migratory flight patterns. The Proposed Action will be located in an area that would not be utilized by migratory birds. If migratory birds were observed within the proposed project area, construction activities would halt and a biologist would be contacted.

4.1.4 National Historic Preservation Act (15 USC 470 et seq.)

Section 106 of the NHPA requires federal agencies to evaluate the effects of federal undertakings on historical, archaeological and cultural resources. The determination of effect on any historical, archaeological, or cultural resources is pending SHPO concurrence.

4.1.5 Environmental Justice (Executive Order 12898)

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, as amended, directs federal agencies to develop an Environmental Justice Strategy that identifies and addresses disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations. According to the Council on Environmental Quality's guidance, agencies should consider the composition of the affected area to determine whether minority populations, low-income populations, or Indian Tribes are present in the area affected by the Proposed Action, and if so, where there may be disproportionately high and adverse environmental effects. The Proposed Action would support the Tribe by providing reliable water supply on the Reservation, and is thus beneficial to the Tribe.

Section 5 List of Preparers and Reviewers

Carolyn Bragg, Natural Resources Specialist, Mid-Pacific Region Patricia Rivera, Indian Trust Assets, Mid-Pacific Region Amy Barnes, Archaeologist, Mid-Pacific Region

Section 6 References

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Appendix - A



Photo 1. View of agriculture (pasture) area facing east.



Photo 2. View of agriculture (pasture) area facing northeast.



Photo 3. View of agriculture (pasture) area facing west-southwest.